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(54) Title: METAL PATTERN FORMING METHOD, METAL PATTERN OBTAINED BY THE SAME, PRINTED WIRING BOARD, CONDUCTIVE FILM FORMING METHOD, AND CONDUCTIVE FILM OBTAINED BY THE SAME

Interface of
plating (catalyst) layer/
polymer layer



Electroplating
layer

Electroless plating
layer

Organic/Inorganic
hybrid layer

(57) Abstract: The present invention provides a method of forming a metal pattern and a metal pattern obtained by the method. The method includes the steps of (I) forming on a substrate a polymer layer in which a polymer having a functional group that interacts with an electroless plating catalyst or a precursor thereof is chemically bonded directly to the substrate in a pattern form, (II) adding the electroless plating catalyst or precursor thereof to the polymer layer, and (III) forming a metal layer in the pattern form by electroless plating. The present invention also provides a method of forming a conductive film, including the steps of (A) forming on a substrate a polymerization initiating layer in which a polymer having, on a side chain thereof, a crosslinking group and a functional group having polymerization initiating capability is immobilized by a crosslinking reaction on the surface of the base material, (B) generating a graft polymer by chemically bonding a polymer having a functional group that interacts with an electroless plating catalyst or a precursor thereof directly onto the entire surface of the polymerization initiating layer, (C) adding the electroless plating catalyst or precursor thereof to the graft polymer, and (D) forming a metal layer by electroless plating.



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